## **CLAIMS**

## What is claimed is:

A method for controlling an antenna system, the method comprising:
collecting information associated with at least one of a plurality of frames
received by a portion of a plurality of antennas; and

determining at least one starting antenna from said plurality of antennas based on said collected information received by said portion of said plurality of antennas.

- 2. The method according to claim 1, wherein said portion of a plurality of antennas are receiving antennas and a remaining portion of said plurality of antennas are transmitting antennas.
- 3. The method according to claim 2, further comprising selecting said at least one starting antenna from said receiving antennas.
- 4. The method according to claim 2, further comprising selecting said at least one starting antenna from said transmitting antennas.
- 5. The method according to claim 1, further comprising collecting at least one of a plurality of selection metrics associated with said at least one of a plurality of frames received by said portion of a plurality of antennas.
- 6. The method according to claim 5, wherein said at least one of a plurality of selection metrics is a power estimation, a signal-to-noise ratio, a packet error rate or bit error rate, a propagation channel characteristic, and/or a channel interference level.

- 7. The method according to claim 5, further comprising selecting at least one of said at least one of a plurality of selection metrics to determine said at least one starting antenna.
- 8. The method according to claim 1, further comprising selecting at least one of said at least one of a plurality of frames to determine said at least one starting antenna.
- 9. The method according to claim 1, further comprising determining said at least one starting antenna based on a majority polling scheme of at least a portion of said collected information.
- 10. The method according to claim 1, further comprising determining said at least one starting antenna based on a weighted sum scheme of at least a portion of said collected information.
- 11. The method according to claim 10, wherein said weighted sum scheme corresponds to the response of a first-order Infinite Impulse Response (IIR) filter or to the response of a Finite Impulse Response (FIR) filter.
- 12. A machine-readable storage having stored thereon, a computer program having at least one code section for controlling an antenna system, the at least one code section being executable by a machine for causing the machine to perform steps comprising:

collecting information associated with at least one of a plurality of frames received by a portion of a plurality of antennas; and

determining at least one starting antenna from said plurality of antennas based on said collected information received by said portion of said plurality of antennas.

- 13. The machine-readable storage according to claim 12, wherein said portion of a plurality of antennas are receiving antennas and a remaining portion of said plurality of antennas are transmitting antennas.
- 14. The machine-readable storage according to claim 13, further comprising code for selecting said at least one starting antenna from said receiving antennas.
- 15. The machine-readable storage according to claim 13, further comprising code for selecting said at least one starting antenna from said transmitting antennas.
- 16. The machine-readable storage according to claim 12, further comprising code for collecting at least one of a plurality of selection metrics associated with said at least one of a plurality of frames received by said portion of a plurality of antennas.
- 17. The machine-readable storage according to claim 16, wherein said at least one of a plurality of selection metrics is a power estimation, a signal-to-noise ratio, a packet error rate or bit error rate, a propagation channel characteristic, and/or a channel interference level.
- 18. The machine-readable storage according to claim 16, further comprising code for selecting at least one of said at least one of a plurality of selection metrics to determine said at least one starting antenna.
- 19. The machine-readable storage according to claim 12, further comprising code for selecting at least one of said at least one of a plurality of frames to determine said at least one starting antenna.
- 20. The machine-readable storage according to claim 12, further comprising code for determining said at least one starting antenna based on a majority polling scheme of at least a portion of said collected information.

- 21. The machine-readable storage according to claim 12, further comprising code for determining said at least one starting antenna based on a weighted sum scheme of at least a portion of said collected information.
- 22. The machine-readable storage according to claim 21, wherein said weighted sum scheme corresponds to the response of a first-order Infinite Impulse Response (IIR) filter or to the response of a Finite Impulse Response (FIR) filter.
- 23. A system for controlling an antenna system, the system comprising: a processor that collects information associated with at least one of a plurality of frames received by a portion of a plurality of antennas; and

said processor determines at least one starting antenna from said plurality of antennas based on said collected information received by said portion of said plurality of antennas.

- 24. The system according to claim 23, wherein said portion of a plurality of antennas are receiving antennas and a remaining portion of said plurality of antennas are transmitting antennas.
- 25. The system according to claim 24, wherein said processor selects said at least one starting antenna from said receiving antennas.
- 26. The system according to claim 24, wherein said processor selects said at least one starting antenna from said transmitting antennas.
- 27. The system according to claim 23, wherein said processor collects at least one of a plurality of selection metrics associated with said at least one of a plurality of frames received by said portion of a plurality of antennas.

- 28. The system according to claim 27, wherein said at least one of a plurality of selection metrics is a power estimation, a signal-to-noise ratio, a packet error rate or bit error rate, a propagation channel characteristic, and/or a channel interference level.
- 29. The system according to claim 27, wherein said processor selects at least one of said at least one of a plurality of selection metrics to determine said at least one starting antenna.
- 30. The system according to claim 23, wherein said processor selects at least one of said at least one of a plurality of frames to determine said at least one starting antenna.
- 31. The system according to claim 23, wherein said processor determines said at least one starting antenna based on a majority polling scheme of at least a portion of said collected information.
- 32. The system according to claim 23, wherein said processor determines said at least one starting antenna based on a weighted sum scheme of at least a portion of said collected information.
- 33. The system according to claim 32, wherein said weighted sum scheme corresponds to the response of a first-order Infinite Impulse Response (IIR) filter or to the response of a Finite Impulse Response (FIR) filter.